

83
1Claims

1. A method for allowing a user to select one of a plurality of items, the method employing a device having a display area (406) and, separately from the display area, a data input means (400) which registers a selection made
5 by the user within a loop-shaped range,

the method including:

displaying within the display area (406) a number of regions (401, 402, 403, 404, 405) equal to the number of items;

- 10 defining within the range (400) a number of sections equal to the number of items, the arrangement of said sections corresponding to the arrangement of said regions (401, 402, 403, 404, 405) of the display area, each section corresponding to a respective region,

whereby the user can select one of said items by selecting a respective one of said sections;

- 15 characterized in that the data input means is rotatable circumferentially by the user, the data input means registering the degree of rotation independently of said selection within the range.

2. A method for allowing a user to select one of a plurality of items, the method employing a device having a display area and, separately from the
20 display area, a data input means which registers a selection made by the user within a loop-shaped range,

the method including at least once performing the steps of:

(a) displaying within the display area a number of regions, each region corresponding to a respective item,

84
2

(b) defining a plurality of subsets of said regions;

(c) defining within the range a number of sections equal to the number of subsets, the arrangement of said sections corresponding to the arrangement of the respective subsets of regions, whereby the user can
5 select one of said subsets by selecting the respective one of said sections;

(d) optionally, at least one step of:

(i) defining a plurality of subsets of said selected subset of regions; and

(ii) defining within the range a number of sections equal to the number of subsets, the arrangement of said sections corresponding to the
10 arrangement of the respective subsets of regions, whereby the user can select one of said subsets by selecting the respective one of said sections; and

(e) defining within the range a number of sections equal to the number of items in the previously selected subset, the arrangement of said sections
15 corresponding to the arrangement of the respective regions representing the items, whereby the user can select one of said items by selecting the respective one of said sections;

wherein the data input means is rotatable circumferentially by the user, the data input means registering the degree of rotation independently of said
20 selection within the range.

3. A method according to claim 1 or claim 2 in which the regions (401, 402, 403, 404, 405) are provided along a path corresponding to the circumferential direction of the range, the path within the display area (406) is independent of the number of regions (401, 402, 403, 404, 405), and the step
25 of displaying the regions (401, 402, 403, 404, 405) includes partitioning the

85
8

path into a number of elements corresponding to the number of regions (401, 402, 403, 404, 405) and displaying a region in each path element.

4. A method according to claim 1, claim 2 or claim 3 in which for each possible number of regions (401, 402, 403, 404, 405) up to a maximum, there is a predefined arrangement of that number of regions.
5. A method according to any of claims 1 to 4 in which the regions (401, 402, 403, 404, 405) have respective centres which are not on a straight line.
6. A method according to any preceding claim in which the range is a range of circumferential locations within a loop-shaped contact sensitive area.
- 10 7. A method according to claim 6 in which the contact sensitive area encircles the display area (406).
8. A method according to any claim 6 or claim 7 in which the data input means (400) has a rest plane, is cantable out of the rest plane, and is sensitive to the direction in which it is canted, said range being a range of directions in which the data input means (400) can be canted, the user making said selection by contacting the device to cant the data input means (400) in a selected direction.
- 15 9. A method according to any preceding claim in which the sections collectively cover the whole of the contact sensitive area, so that defining the sections is equivalent to partitioning the entire area.
- 20 10. A method according to any preceding claim in which the user can (i) vary the selection of the item, information being displayed in relation to the item corresponding to the present selection, and (ii) by a predetermined action make a definitive selection.

86
A

11. A method according to claim 10 in which the variation of the selection is made by rotating the data input means.
12. A method according to any preceding claim which is performed repeatedly, on each occasion selecting from items which are logically related
5 to the item selected in the previous step.
13. A method according to any preceding claim in which the logical relationships are of any type or types suitable for defining a hyperspace.
14. A method according to any preceding claim in which the items are data files, sets of data files or portions of data files.
- 10 15. A method according to claim 14 in which at least some of the data files are stored in a location remote from the device but accessible to the device.
16. A method according to claim 14 or claim 15 in which, upon selecting a data file, the user is presented with at least some information about that data file.
- 15 17. A method according to any of claims 14 to 16 in which, upon selecting a data file, the user can open the selected data file.
18. A device for allowing a user to select one of a plurality of items, the device having
- a display area (406), for displaying a number of regions (401, 402, 403,
20 404, 405) equal to the number of items;
- data input means (400), separate from said display area (406), which registers a selection made by the user within a loop-shaped range; and
- a processor for (i) defining within the range a number of sections equal to the number of items, the arrangement of said sections corresponding to the

87
5

arrangement of said regions of the display area and each section corresponding to a respective region, and (ii) upon a user selecting a respective one of the sections, determining the corresponding item;

5 characterized in that the data input means (400) is circumferentially rotatable, whereby the user can enter data into the data input means by rotating the data input means (400) independently of said selection within the range.

19. A device for allowing a user to select one of a plurality of items, the device having

10 a display area for displaying a number of regions equal to the number of items;

a data input means which registers a selection made by the user within a loop-shaped range; and

a processor for

15 (a) defining a plurality of subsets of said regions;

(b) defining within the range a number of sections equal to the number of subsets, the arrangement of said sections corresponding to the arrangement of the respective subsets of regions, whereby the user can select one of said subsets by selecting the respective one of said sections;

20 (c) optionally, at least one step of:

(i) defining a plurality of subsets of said selected subset of regions; and

(ii) defining within the range a number of sections equal to the number of subsets, the arrangement of said sections corresponding to the arrangement of the respective subsets of regions, whereby the user can

88
8

select one of said subsets by selecting the respective one of said sections;
and

- (d) defining within the range a number of sections equal to the number of items in the previously selected subset, the arrangement of said sections corresponding to the arrangement of the respective regions representing the items, whereby the user can select one of said items by selecting the respective one of said sections;

the data input means being circumferentially rotatable, whereby the user can enter data into the data input means by rotating the data input means independently of said selection within the range.

20. A device according to claim 18 or 19 in which the data input means (400) is not adapted to display information.
21. A device according to claim 18 or 19 in which the range is a range of circumferential locations within a loop-shaped contact-sensitive area (400).
- 15 22. A device according to claim 21 in which the contact sensitive area encircles the display (406).
- 20 23. A device according to any of claim 21 or claim 22 in which the data input means (400) has a rest plane, is cantable out of the rest plane, and is sensitive to the direction in which it is canted, said range being a range of directions in which the data input means (400) can be canted, whereby the user can make the selection within the range by contacting the data input means to cant the data input means (400) in the corresponding direction.
24. A device according to any of claims 18 to 23 which is an item of consumer electronics. ¹¹²

89
7

25. A device according to any of claims 18 to 24 in which the display area (406) is a low resolution screen.
26. A device according to any of claim 26 to 25 which is a one-piece unit.
27. A device according to any of claims 18 to 26 which is portable.
- 5 28. A computer program product readable by a computer device which causes the computer device to perform a method according to any of claims 1 to 17.